CANOPY PARTNERS & GREENSBORO RADIOLOGY: Improving Radiology Reporting Quality with M*Modal and a Performance Report Card
Background

Canopy Partners (Greensboro, NC) is a management service organization that offers technology and management services to physician practices and hospitals. Canopy Partners focuses on solving healthcare organizations’ problems with innovative, robust, and efficient solutions. The company performs work for 12 hospitals (including Chatham Hospital, Cone Health, Martinsville Memorial Hospital, Morehead Memorial, Randolph Hospital and Select Specialty Hospital), five imaging centers (including Greensboro Radiology and Greensboro Imaging), and dozens of physician practices.

One of Canopy Partners’ main goals is to help radiology groups and departments stay at the center of the healthcare delivery model. In the past, that has been achieved through implementation of technology such as Picture Archiving Communication Systems (PACS) and speech recognition. The result was increased sub-specialization, decreased turnaround time, and high availability of studies from all sources. In the past few years, the definition of quality has become more stringently defined as Accountable Care Organizations (ACOs) have gained in popularity. As reimbursement shifts from quantity to quality, the radiology sector must ensure and accurately demonstrate its contribution to overall outcomes.

In 2011, Greensboro Radiology realized they needed to take a proactive approach and requested a solution from Canopy Partners. The two companies began testing M*Modal Catalyst for Radiology™. The original focus was on creating normalized patient reports that referring physicians could act upon. They utilized M*Modal Catalyst for Radiology in a retrospective QA functionality to ensure they were covering all the body parts in results, meeting Physician Quality Reporting System (PQRS) criteria, and other measures. This led to other opportunities to increase and demonstrate quality.
The Challenge

“Radiology professionals are increasingly asked to demonstrate the value they provide to ACOs and hospitals—this is part of a trend for reimbursements to be based on quality rather than quantity,” notes Stephen Willis, Chief Information Officer of Canopy Partners. “M*Modal helps us meet this customer need by putting structure around unstructured data in reports. M*Modal Catalyst for Radiology offers an elegant way to pull the data out and present it to organizations to show where they are delivering high quality, and where they need to improve.”

The main function required by Canopy Partners was the ability to mine the data within radiology reports. Previously, this process was cumbersome, requiring a significant manual process. Canopy Partners realized that applying natural language understanding to their documents would streamline and largely automate this process. While many radiology groups have a high degree of standardization around reporting, no two radiologists describe the same symptoms in the same manner. “It was hard to tease out the critical information from the reports,” says Willis. “M*Modal Catalyst™ allowed us to perform that exact task.”

The Solution

“Canopy Partners chose M*Modal Catalyst for two main reasons,” explains the Canopy Partners CIO. “One was technical ability. We loaded a test set of a few hundred thousand reports, and M*Modal Catalyst’s ability to mine unstructured data was extremely accurate, convincing us that the underlying technology was sound and expandable. The second was M*Modal’s ability to be true partners for us. Many providers in this space offer ‘out of the box’ solutions with no flexibility. M*Modal worked with us to meet our needs, and helped us capitalize on the great ideas that resulted from our experience with this technology.”

Now Canopy Partners can help hospitals make decisions on the need for new equipment, staffing, resources and protocols based on information they can provide in seconds rather than hours or weeks.

One example of the successful use of M*Modal Catalyst for Radiology by Canopy Partners was in response to a request for identification of positive findings of pulmonary embolism within hundreds of thousands of radiology reports of Computed Tomography Angiogram (CTA) chest exams. “We were able to produce that report immediately, in real time, where this used to take hours,” says Willis. “Our hospital partner was delighted.”

“Overall, M*Modal Catalyst for Radiology has allowed us to put some structure and meaning around the unstructured language contained in roughly 1 million annual reports.” Stephen Willis
To support Canopy Partners’ aim of helping radiology providers improve quality, the company worked with Greensboro Radiology to develop a Professional Services Performance Report Card (Report Card) showing key performance metrics such as PQRS reporting compliance, allowing customers to demonstrate value in near real time. “M*Modal Catalyst for Radiology allows Canopy Partners to help improve radiology practices—and to differentiate itself from groups that simply provide IT and billing support,” states Willis. “We use the M*Modal product to help customers understand what various quality measures mean for the practice, to the hospital and the ACO as a whole. We can then mine data to determine whether the measures are being achieved in real time. M*Modal Catalyst works with GRIP to provide an effective way to mine unstructured data. Using the two systems together helps improve patient safety, for example, tracking levels and frequency of radiation exposure. It also has enabled Greensboro Radiology and other Canopy Partners clients to obtain bonus payments based on their PQRS measures compliance.

Another example was a request from partner ACOs to measure the effectiveness of our regional timeline strategy,” notes the Canopy Partners CIO. “We were able to show that the availability of prior imaging in the Canopy Regional Imaging Timeline put one client’s recommended follow-up rate at 50% above the national average, directly demonstrating cost savings value to the ACO.”

“Overall, M*Modal Catalyst for Radiology has allowed us to put some structure and meaning around the unstructured language contained in roughly 1 million annual reports,” according to Willis. “This enables us to present business analytics and intelligence solutions across unstructured data, enhancing our ability to service clients, and providing a more complete picture of what’s happening within their organization than we could before. M*Modal Catalyst informs rapid decisions based on trusted data.”

“As the healthcare model moves from volume towards value, our clients need to measure their performance differently, and M*Modal Catalyst allows us to give them a holistic report card with which to measure.”

The Professional Services Report Card

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The concept of the Report Card was originally created by Greensboro Radiology’s Best Practice Oversight Committee, as a tool to keep quality as high as possible across all services. “M*Modal Catalyst enables us to work with them to track agreed key performance metrics on a radiologist-by-radiologist or hospital-by-hospital basis, in close to real time,” explains the Canopy Partners CIO. One of the tools employed is the Global Radiology Information Portal (GRIP), one of Canopy Partners’ business analytic products, which takes account of factors such as radiologists’ schedules, performance within schedule, and data points on finance, billing, and past performance. M*Modal Catalyst works with GRIP to provide an effective way to mine unstructured data. Using the two systems together helps improve patient safety, for example, tracking levels and frequency of radiation exposure. It also has enabled Greensboro Radiology and other Canopy Partners clients to obtain bonus payments based on their PQRS measures compliance.
The Impact

With assistance from M*Modal, Canopy Partners and Greensboro Radiology were able to develop reports to show critical findings communication compliance, ensuring inclusion of society-based recommendations in standard language. Canopy Partners was also able to respond quickly to hospital and group requests for one-off reports in order to help them make better decisions.

“Customer reactions to the improved reporting have been extremely good. The hospitals they serve like it even better,” notes Willis. “Canopy Partners always works to be a true partner with our vendors and clients. M*Modal Catalyst for Radiology helps us build these partnerships—showing hospitals and radiology groups that we are more than a cost center. We are committed to the same outcomes that they are, and we all want patients ‘home and healthy’ as fast as possible. The M*Modal Catalyst technology has a direct role in delivering this to the customer, which changes their view of Canopy Partners dramatically. In fact, our radiology group recently won a large contract due to the ability to participate meaningfully in the local ACO—delivering a positive impact on future revenues.”

M*Modal Catalyst for Radiology and Canopy Partners’ Report Card have yielded “an immediate improvement in patient care, due to more specific, accessible records,” states Willis. “Improved reimbursement efficiency is on the horizon, as we learn how to optimize reporting accuracy. In the future, as reimbursement is captured by value not volume, the challenge will be to show change over time. We are using M*Modal Catalyst for Radiology as a tool to prepare for ICD-10, with the goal of minimizing impact from a reimbursement standpoint.”
The Future

Looking ahead, Canopy Partners is testing the combination of M*Modal Catalyst for Radiology with M*Modal’s Fluency for Imaging Reporting clinical documentation product. The goal is to have closed loop documentation through the combination of these technologies, providing real-time communication within the radiology workflow to help radiologists fulfill quality measures compliance requirements before the reports are finalized. “We’re excited about combining M*Modal’s imaging reporting capabilities, and we are currently implementing the solution now,” notes the Canopy Partners CIO. “M*Modal Catalyst for Radiology is embedded in M*Modal Fluency for Imaging to give real-time feedback as a report is created, and the results are promising. This would be the ‘holy grail of radiology reporting’, ensuring that our reports are top quality as they go out the door. The ability to process the language of reporting while it’s happening will be useful for Canopy Partners and for our radiologist partners, and will also be helpful for physicians, capturing information at the start rather than the end of the documentation process.”

“In the future, we’ll definitely add more metrics to the Professional Services Performance Report Card, and use it with more clients,” according to Willis. “We plan to start reporting against ICD-10 metrics, developing a dashboard to allow partners to see relevant data in real time, showing their practice or hospital radiology record, which is a challenge from an EMR perspective. We’re excited that ACOs are coming to us for data—and that we can turn it round quickly. Our goal is for ACOs to see radiology as a vital part of the healthcare continuum.”

“We believe that a more consistent, specific and informative report is the best way to ensure radiology is contributing to outcomes in a meaningful fashion,” concludes Willis. “Adding pathology and other specialty data to M*Modal Catalyst for Radiology and M*Modal Fluency for Imaging real-time communication capabilities could also help increase the quality of reports and collaboration between physicians. The correlation between radiology and pathology is an important learning tool and indicator of quality. Additionally, Canopy Partners is currently testing M*Modal Catalyst for Radiology to aid in ICD-10 compliance training, and hopes to bring this into real-time coaching with M*Modal Fluency for Imaging in the near future.”

M*MODAL EXECUTIVES ARE “TRUE PARTNERS”

“Top to bottom, the M*Modal team is always willing to listen to our needs, and discuss any idea. They behave as true partners, and work with us to implement new ideas and tailor the product to our needs,” adds Willis. “This sets M*Modal apart. The people are very talented, responsive and nimble—allowing M*Modal Catalyst to change with or ahead of the industry. This is a huge differentiator compared with other vendors in same space, who offer product-in-a-box. That is not something we can tolerate. One simple solution is never going to work—medicine is much more variable than that.”
M*Modal Fluency for Imaging™ at a Glance

M*Modal Fluency for Imaging™:

- Provides real-time, information-based, closed-loop physician feedback
- Delivers supplemental and context-specific clinical information at the time of interpretation
- Provides quick access to a summarized, longitudinal patient history for clinical context
- Enables more complete, higher quality documentation and improved compliance
- Offers integrated and automated Critical Test Results Management (CTRM) and Peer Review workflow extensions
- Creates an expandable and scalable technology platform for multi-site, multi-vendor workflow management
- Boosts referring physician satisfaction
- Enhances radiologists’ value to the care cycle

Canopy Partners at a Glance

Canopy Partners is a management service organization focused on solving healthcare organizations’ problems with innovative, robust, and efficient solutions. Canopy Partners is piloted by a dynamic group seasoned with more than 141 years of healthcare leadership experience. The group’s understanding of the evolving healthcare ecosystem comes from its origins as part of Greensboro Radiology (NC), the Piedmont Triad’s premier provider of medical diagnostic imaging services and interventional radiology practices. Here, Canopy Partners’ executives focused on the day-to-day business challenges involved with IT, billing and administration. After winning several competitive contracts, it was agreed the group should spin off everyone except the radiologists into an independent company, leading to the genesis of Canopy Partners. The group performs work for 12 hospitals, 5 imaging centers, and dozens of physician practices. Our leadership team prides themselves on delivering innovative and impressive results that translate into increased patient care, a tighter revenue cycle, and seamless integrations.

Stephen Willis

Stephen Willis is Chief Information Officer of Canopy Partners, which offers technology and management services to physician practices and hospitals. Stephen has over 12 years experience in IT, with 8 of those years in the healthcare IT management across multiple disciplines. He previously served as CIO and Lead Systems Administrator for Greensboro Radiology and IT Manager for Physician’s Medical Enterprises. Stephen serves on numerous committees including the CIO Expert Panel for the McDowell Research Center for Global IT Management, and as a designing contributor to the Community Care of North Carolina’s effort to implement clinical decision support across the State. He has a Bachelor of Arts from Wake Forest University.

The Project

Canopy Partners was looking to improve imaging reporting quality and compliance.

- Canopy Partners built the Professional Services Report Card to monitor and relay key performance metrics such as PQRS
- M*Modal Catalyst for Radiology
- M*Modal Fluency for Imaging

Challenges Faced

- Shift in focus from quantity to quality, driving the radiology sector to ensure and accurately demonstrate its contribution to overall outcomes
- Need to put structure around unstructured data in reports

Benefits Achieved

- Canopy Partners was able to successfully develop reports to show critical findings communication and PQRS compliance
- They can now respond quickly (minutes vs hours) to requests for real-time reports to inform decision making
- Canopy Partners was able to demonstrate that radiology is more than a cost center, delivering an immediate improvement in patient care
- M*Modal Catalyst is proving to be a useful tool to prepare for ICD-10
About M*Modal

M*Modal is a leading healthcare technology provider of advanced clinical documentation solutions, enabling hospitals and physicians to enrich the content of patient electronic health records (EHR) for improved healthcare and comprehensive billing integrity. As one of the largest clinical transcription service providers in the U.S., with a global network of medical editors, M*Modal also provides advanced cloud-based Speech Understanding™ and Natural Language Understanding technologies and data analytics that enable physicians and clinicians to include the context of their patient narratives into electronic health records in a single step, further enhancing their productivity and the cost-saving efficiency and quality of patient care at the point of care. M*Modal has been recognized as one of the fastest growing technology companies in North America, placing in the top third of Deloitte’s Technology Fast 500 for 2012. For more information, please visit mmodal.com, Twitter, Facebook and YouTube.